

In the Claims:

Please cancel claims 1-13 and add new claims 16-24 as indicated below. This listing of claims replaces all prior versions.

1-13. (canceled)

14. (original) A computer-based automated method for tracking the movement of masks used in a wafer processing facility, the masks being moved in mask pods, the method comprising:

for each mask, generating mask data that includes a mask identification code;
using a computer to process the mask data, including cross-referencing respective mask identification codes to pod identification codes, and updating the mask data to include a facility location identification code;

conducting a degradation analysis on each mask that includes a comparison of the mask data to a mask baseline specification so as to generate degradation data for each mask; and

analyzing and tracking the mask degradation data to determine the useful life of each mask.

15. (original) The method of claim 14, further including: tracking an event associated with a select wafer lot, the event tracking including matching the mask identification code with the select wafer lot.

16. (new) The method of claim 14, further including continuously updating the mask data to reflect the new location identification code in response to the mask being routed to a new location.

17. (new) The method of claim 14, wherein conducting a degradation analysis on each mask includes comparing the mask data to desired mask attributes.

18. (new) The method of claim 14, further including modeling the mask degradation.

19. (new) The method of claim 14, wherein determining the useful life of each mask includes comparing the mask data with a predefined level of mask degradation.
20. (new) The method of claim 14, wherein the useful life of each mask is determined as the mask's movement is tracked.
21. (new) The method of claim 20, wherein the determined useful life of each mask is continuously updated as the mask moves throughout the wafer processing facility.
22. (new) The method of claim 14, wherein the degradation data includes data corresponding to the effects of cleaning the mask.
23. (new) The method of claim 14, wherein the degradation data includes data corresponding to the effects of handling the mask.
24. (new) The method of claim 14, wherein the degradation data includes data corresponding to the effects of particle contamination of the mask.